## REMARKS

### Status

Claims 17-29 are pending in the application. Claims 1-16 have been canceled. Claims 17-29 are new. Reconsideration is respectfully requested.

### Examiner Interview

Applicants thank Examiner Kassa for the telephonic interview on March 6, 2009. During the interview, the prior art references and claim 1 were discussed. No agreement was reached.

### Rejection Under 35 U.S.C. §103

Claims 1-6 and 10-15 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,828,361 ("Gibson") and U.S. Patent No. 6,369,911 ("Hattori"), and further in view of U.S. Patent Application Publication No. 2002/0067509 ("Roylance"). Claim 1-6 and 10-15 have been canceled, rendering the rejection moot.

#### The Combination of References

Gibson describes a method and system for rapidly transmitting multicolor or gray scale display data having multiple bits per pixel to a display device. *See* Gibson, abstract. Hattori describes a printer including a pulse generating circuit. *See* Hattori, col. 3, line 41-49. Roylance describes a printer that utilizes resolution enhancement techniques. *See* Roylance, abstract.

The Examiner equates computer display data with printer data, or at least asserts that one of ordinary skill in the art at the time of the invention would have been able to use the display data of Gibson to control a print engine because displays and printers are in the "same field of endeavor." *See* Office Action, p. 7.

Applicants disagree. Computer displays and printers are not in the same field of endeavor. In addressing analogous and nonanalogous art, the M.P.E.P. and the Supreme Court have required that the determination of whether a reference should be considered analogous prior art is based on a problem-solution oriented approach. "Under the correct analysis, any need or problem known in the field of endeavor at the time of the invention and addressed by the patent [or application at issue] can provide a reason for combining the elements in the manner claimed."

M.P.E.P. §2141.01(a) (*citing* KSR International Co. v. Teleflex Inc., 550 U.S 398, 82 USPQ2d 1385, 1397 (2007)).

In this case, there are no problems addressed by Gibson that can provide a reason for combining Gibson's display data with Hattori's printer. Likewise, there are no problems in Hattori or known in the printer field that provide a reason for including Gibson's display data with Hattori's printer.

Further, the problem addressed by the application at issue is reducing the costs and complexities associated with the hardware resources of the printer. *See* specification, ¶2. This problem is simply not applicable to display devices. Display devices or computer monitors typically are controlled by video cards or other controller in the computer. In other words, the problem addressed by the application at issue does not apply to Gibson.

Therefore, based on the problems addressed by Applicant and the prior art, one of ordinary skill in the art at the time of the invention would have not considered Gibson analogous to either Hattori or the Application at issue, according to the rationale set forth by M.P.E.P. §2141.01(a).

Finally, the combination proposed by the office action would destroy the Gibson reference. A *prima facie* case for obviousness under 35 U.S.C. § 103(a) cannot be made if the proposed modification changes the principle operation of the reference, which would destroy the reference. *See* M.P.E.P. §2143.01(VI.). A modification changes the principle operation of a reference when the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." *See* M.P.E.P. §2143.01(VI.) (citing 270 F.2d at 813, 123 USPQ at 352).

Gibson discloses a method and system for rapidly transmitting multicolor or gray scale display data having multiple bits per pixel to a display device. *See* col. 1, lines 14-18. No part of Gibson indicates the invention is for use in any type of device besides a display device. In fact, Gibson makes no mention of a printer or a printing device.

Applicants respectfully submit that modifying Gibson in the manner proposed by the Office Action would change Gibson's principle operation. If the raster data in Gibson were modified in such a way to make it suitable for use in the printing device of Hattori, it would no longer be operable for use with a display. The intended purpose of Gibson is to avoid antialiased characters. *See* col. 2, lines 18-20. An antialiased character represents the graphical object in more than one level of illuminative intensity, which allows pixels on the border of the object to be dimmed to a lower level of illuminative intensity. *See* col. 2, lines 24-28. This changes the perception of the graphical object when it is viewed on a screen. Printing devices, such as the one described by Hattori, do not have an illuminative intensity because the image is printed on paper rather than displayed on a screen. Therefore, if the data of Gibson were used in the printing device of Hattori, it could no longer perform the stated purpose of Gibson. In other words, the modification would impermissibly destroy the intended purpose of Gibson.

For at least these reasons, one of ordinary skill in the art would have had no reason to combine the display data of Gibson, the printer of Hattori, and the resolution enhancement of Roylance.

Claims 17-22

Claim 17 recites, *inter alia*, "generating page data having a first bit rate per plane per pixel from a first application running on a host machine; examining the page data in groups of at least two adjacent pixels by use of a second application running on the host machine; rendering printer ready data based on the examination of the page data; combining, within the host machine, the printer ready data with print engine control commands operable to control a print engine to create interim data having a second bit rate per plane per pixel, the second bit rate being lower that the first bit rate."

As pointed out by the Examiner, Gibson describes "a color image as multiple bit per pixel raster data, wherein the color of each pixel is encoded in a multiple bit color value." *See* col. 5, line 66 – col. 6, line 1. However, Gibson fails to teach or suggest, "generating page data having a first bit rate per plane per pixel from a first application running on a host machine" and "examining the page data in groups of at least two adjacent pixels by use of a second application running on the host machine."

Finally, Gibson fails to teach or suggest "combining, within the host machine, the printer ready data with print engine control commands operable to control a print engine to create interim data having a second bit rate per plane per pixel, the second bit rate being lower that the first bit rate."

Because Roylance and Hattori fail to fill in the gap left by Gibson, none of the cited prior art or combinations therefore teach or suggest all of the features of claims 17-22.

Claims 23-29

Claim 23 recites, *inter alia,* "a first application on the host machine configured to generate page data having a first bit rate per plane per pixel; a second application on the host machine examining the page data in groups of at least two adjacent pixels; a print data processor in the host machine configured to render printer ready data based on the examination of the page data and configured to combine the printer ready data with print engine control commands operable to control a print engine to create interim data having a second bit rate per plane per pixel, the second bit rate being lower that the first bit rate."

For at least the reasons addressed above, Gibson, Hattori, Roylance, and combinations thereof fail to teach or suggest "a first application on the host machine configured to generate page data having a first bit rate per plane per pixel; [and] a second application on the host machine examining the page data in groups of at least two adjacent pixels" or "a print data processor in the host machine configured to render printer ready data based on the examination of the page data and configured to combine the printer ready data with print engine control commands operable to control a print engine to create interim data having a second bit rate per plane per pixel, the second bit rate being lower that the first bit rate."

## Conclusion

In view of the remarks above, Applicants respectfully submit that all of the pending claims are in condition for allowance and seek an early allowance thereof. If the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, the Examiner is respectfully requested to contact the undersigned at (312) 840-3225.

Respectfully submitted,

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Dated: April 27, 2009